# MIRS Product Range: MIRS8-T-V

## Summary Information:

- Mid-infrared spectral sensor for oil analysis in moving vehicles
- Used in mobile machinery, agricultural equipment, military
- 8 customised payload channels

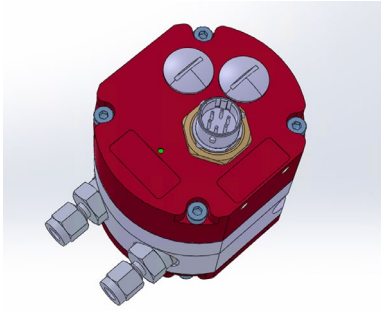

Figure 1a: MIRS8-T-V Sensor

## Product Description:

The MIRS8-T-V transmission sensor is a rugged and robust sensor designed for online measurements of engine oils in moving vehicles. The MIRS8-T-V is a novel sensor platform targeted to be used in mobile machinery, agricultural equipment, construction machinery or military vehicles. The sensor complies with the demanding EMV and vibration specification for these applications.

The oil sample is provided to the sensor via compression fitting (6mm) and the sensor typically determines relevant oil parameters such as oxidation, water, soot, TAN, TBN and additive concentrations. The exact parameters that can be measured are dependent on the oil type used and the sensor will be specifically calibrated for each oil type.

The operating temperature of the sensor lies between -40C to 80C but it is essential that the sample fluid does not freeze inside the measurement cell

The sensor should be mounted directly after an oil filter to ensure that no particles >50µm are entering the sensor. Particles entering the sensor can potentially cause clogging of the sensor flow cell.

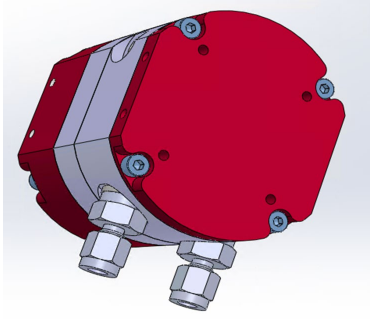

Figure 1b: : MIRS8-T-V Transmission oil sensor with assembly/mounting holes at the bottom and side of the sensor

## Specification of the MIRS-T-V Sensor:

- Article number: 906304-00
- Dimensions: Ø x H / 75 X 69 mm
- Weight: 1200 g
- Housing material: Stainless steel / Aluminium
- Communication interfaces: CAN / CANopen
- Service interface: micro USB maintenance flap
- Operating voltage: 15 – 40 Vdc / nominal 24 Vdc
- IP- Rating: IP67
- Sample Temperature: <70 ºC , no freezing allowed
- Max sample pressure: 15 bar

| PIN | |
|---|---|
| A | Shield |
| B | CAN_L+ |
| C | CAN_H+ |
| D | Isolated GND CAN-BUS |
| E | +24 Vdc |
| F | GND |

Table 1: Pinout of Plug

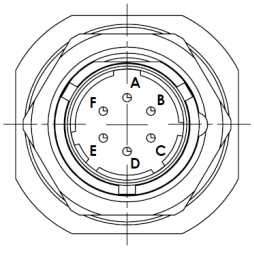


Figure 2: Pinout of MIL-DTL-26482 Series II/VG95238 10-5

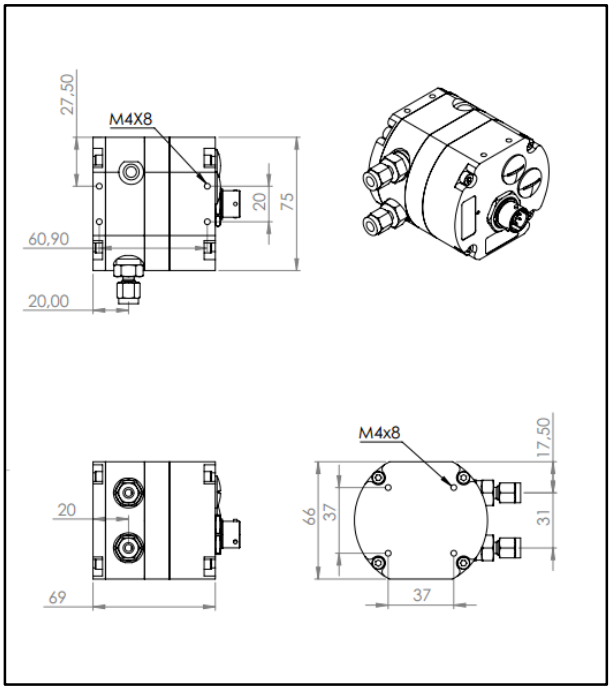


Figure 3: Dimensions and technical drawings of the MIRS8-T-V